

AMENDMENTS TO THE CLAIMS

1. (Canceled)
2. (Currently amended) A method according to ~~claim 1~~ claim 25, wherein ~~selecting the frame~~ as the initial frame ~~comprises selecting~~ comprises the first frame subsequent to a final frame in a preceding segment.
- 3-7. (Canceled)
8. (Currently amended) A method according to ~~claim 1~~ claim 25, wherein selecting one of the frames to be the representative frame comprises selecting a final one of the frames added to the first portion to be the representative frame.
9. (Currently amended) A method according to claim 8, wherein the frame in the sequence following the representative frame is outside the ~~first predefined bound of the frames in the first portion~~ bounding subset.
10. (Currently amended) A method according to ~~claim 1~~ claim 25, and comprising storing the sequence in an archive, and indexing the archive using the representative frame.
11. (Currently amended) A method according to ~~claim 1~~ claim 25, and comprising compressing the sequence using the representative frame.
12. (Canceled)
13. (Currently amended) Apparatus according to ~~claim 12~~ claim 29, wherein the initial frame comprises the first frame subsequent to a final frame in a preceding segment of the sequence.
- 14-18. (Canceled)
19. (Currently amended) Apparatus according to ~~claim 12~~ claim 29, wherein the representative frame comprises the final one of the frames added to the first portion of the segment.

20. (Currently amended) Apparatus according to claim 19, wherein the frame in the sequence following the representative frame is outside the ~~first predefined bound of the frames in the first portion~~ bounding subset.

21. (Currently amended) Apparatus according to ~~claim 12~~ claim 29, and ~~comprising a storage device~~, wherein the processor is arranged ~~to store the sequence in the storage device~~, and to create an index to the sequence in the storage device using the representative frame.

22. (Currently amended) Apparatus according to ~~claim 12~~ claim 29, wherein the processor is arranged to compress the sequence using the representative frame.

23-24. (Canceled)

25. (Currently amended) A computer-implemented method for organizing a sequence of video frames, comprising:

generating a first portion of a segment of the sequence by:

for each frame beginning from an initial frame in the sequence, computing ~~at least one parameter~~ a multi-dimensional vector of parameters indicative of a characteristic of the frame;

determining vector distances between the frames in the sequence responsively to differences in the ~~at least one parameter~~ multi-dimensional vector of parameters among the frames; and

finding, responsively to the distances, a bounding subset comprising at least three of the frames in the sequence, chosen so as to maximize a sum of the distances between all of the at least three frames in the subset, while each of the distances is no greater than a predetermined maximum, such that the first portion comprises the frames in the sequence that are bounded by the at least three of the frames in the bounding subset;

selecting one of the frames in the first portion to be a representative frame for the segment;

and

generating a second portion of the segment by adding to the segment further frames in the sequence subsequent to the first portion while determining that the respective distances between the added further frames and the representative frame are within a predefined bound.

26. (Canceled)

27. (Currently amended) A method according to ~~claim 26~~ claim 25, wherein selecting the bounding subset comprises:

choosing an initial bounding subset;

determining the sum of the distances between one of the further frames added to the sequence and the frames in the initial bounding subset; and

replacing one of the frames in the initial bounding subset with the one of the further frames if replacing the one of the frames will increase the sum of the distances between all of the frames in the subset.

28. (Currently amended) A method according to ~~claim 26~~ claim 25, wherein selecting the one of the frames to be the representative frame comprises, upon determining that a distance between a given frame in the sequence and at least one of the frames in the bounding subset is greater than the predetermined maximum, terminating generation of the first portion and choosing as the representative frame the one of the frames immediately preceding the given frame in the sequence, and

wherein generating the second portion comprises adding the given frame to the second portion.

29. (New) Apparatus for organizing a sequence of video frames, comprising:

a storage device, for storing the sequence; and

a video processor, which is arranged to generate a first portion of a segment of the sequence by computing, for each frame beginning from an initial frame in the sequence, a multi-dimensional vector of parameters indicative of a characteristic of the frame, by determining vector distances between the frames in the sequence responsively to differences in the multi-dimensional vector of parameters among the frames, and by finding, responsively to the distances, a bounding subset

comprising at least three of the frames in the sequence, chosen so as to maximize a sum of the distances between all of the at least three frames in the subset, while each of the distances is no greater than a predetermined maximum, such that the first portion comprises the frames in the sequence that are bounded by the at least three of the frames in the bounding subset,

wherein the video processor is arranged to select one of the frames in the first portion to be a representative frame for the segment, and to generate a second portion of the segment by adding to the segment further frames in the sequence subsequent to the first portion while determining that the respective distances between the added further frames and the representative frame are within a predefined bound.

30. (New) A computer software product for organizing a sequence of video frames, comprising a computer-readable medium in which program instructions are stored, which instructions, when read by a computer, cause the computer to generate a first portion of a segment of the sequence by computing, for each frame beginning from an initial frame in the sequence, a multi-dimensional vector of parameters indicative of a characteristic of the frame, by determining vector distances between the frames in the sequence responsively to differences in the multi-dimensional vector of parameters among the frames, and by finding, responsively to the distances, a bounding subset comprising at least three of the frames in the sequence, chosen so as to maximize a sum of the distances between all of the at least three frames in the subset, while each of the distances is no greater than a predetermined maximum, such that the first portion comprises the frames in the sequence that are bounded by the at least three of the frames in the bounding subset, and

1. wherein the instructions cause the computer to select one of the frames in the first portion to be a representative frame for the segment, and to generate a second portion of the segment by adding to the segment further frames in the sequence subsequent to the first portion while determining that the respective distances between the added further frames and the representative frame are within a predefined bound.